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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,935	08/02/2001	Brigitte Bathe	211712US0X	5782

22850 7590 09/21/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

HUTSON, RICHARD G

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/919,935

Applicant(s)

BATHE ET AL.

Examiner

Richard G. Hutson

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 6/25/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-62 is/are pending in the application.
- 4a) Of the above claim(s) 9-33 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 59-62 is/are allowed.
- 6) ☒ Claim(s) 34-36, 39-44, 46-48 and 50-58 is/are rejected.
- 7) ☒ Claim(s) 37, 38, 45 and 49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/25/2004 has been entered.

Applicants amendment of claims 9, 34-36, 38, 39, 56 and the addition of new claims 59-62 in the paper of 5/10/2004 is acknowledged. Claims 9-62 are still at issue and are present for examination.

Applicants' arguments filed on 5/10/2004, have been fully considered and are deemed to be persuasive to overcome some of the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

Claims 9-33 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention, the requirement having been traversed in Paper No. 13.

### ***Claim Objections***

Claims 37-38, 45, 49 are objected to because of the following informalities:

Claims 37-39, 45, 49 depend from rejected claim 34.

Appropriate correction is required.

***Information Disclosure Statement***

Applicants disclosure of related U.S. Patent application 10/838,245, Moeckel et al., is acknowledged.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 34, 35, 36, 39, 40-44, 46-48, and 50-58 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This rejection was stated in the previous office action as it applied to previous claims 34, 38, 39, 40-44, 46-48, 50-58. In response to this rejection applicants have amended claims 9, 34-36, 38, 39, 56 and added new claims 59-62 and traverse the rejection as it applies to the newly amended claims.

Applicants submit that they have now amended the claims such that they are each drawn to those polynucleotides which are at least 90% identical to SEQ ID NO: 1 and encode a polypeptide which has methylene tetrahydrofolate reductase activity. While such an amendment has resulted in the withdrawal of many of the previously

rejected claims from the current rejection, applicants attention is drawn to current claim 34 which continues to be drawn to those polynucleotides which encode a polypeptide which is merely 90% identical to SEQ ID NO: 2 (see part a). Thus the rejection is maintained for claim 34 and those claims dependent on claim 34 which do not correct the deficiency.

Applicant is referred to the revised guidelines concerning compliance with the written description requirement of U.S.C. 112, first paragraph, published in the Official Gazette and also available at [www.uspto.gov](http://www.uspto.gov).

Claims 34, 35, 36, 39, 40-44, 46-48, and 50-58 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a polynucleotide which encodes a protein having the amino acid sequence of SEQ ID NO: 2, wherein said protein has methylene tetrahydrofolate reductase activity, does not reasonably provide enablement for any polynucleotide which encodes a polypeptide which is merely 90% identical to SEQ ID NO: 2. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

This rejection was stated in the previous office action as it applied to previous claims 34,-36, 38, 39, 40-44, 46-48, and 50-58. In response to this rejection applicants have amended claims 9, 34-36, 38, 39, 56 and added new claims 59-62 and traverse the rejection as it applies to the newly amended claims.

Applicants traverse this rejection by submitting that the claims have been editorially revised for clarity to indicate that the claimed fragments of SEQ ID NO: 1 encode polypeptides having methylene tetrahydrofolate reductase activity, and applicants address many of the Wands factors in supporting applicants position.

Applicants argument has been considered in full and is acknowledged, however found nonpersuasive for the reasons previously stated with respect to claims 34, 35, 36, 38, 39, 40-44, 46-48, and 50-55. While it is acknowledged that applicants previous amendment and traversal has been helpful in the removal of many of the claims previously rejected under this statute, applicants attention is drawn to current claim 34 and those claims dependent on claim 34, as discussed above, which continues to be drawn to those polynucleotides which encode a polypeptide which is merely 90% identical to SEQ ID NO: 2 (see part a), with no function/activity limitation. Thus claims 34, 35, 36, 38, 39, 40-44, 46-48, and 50-55 continue to be rejected under this statute for the reasons previously stated.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 56-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Blanco et al. (Journal of Bacteriology, Vol. 180, No. 6, pp 1586-1591, March 1998, See IDS).

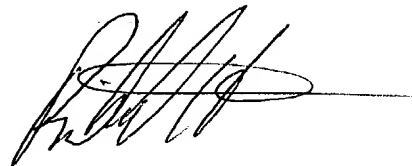
This rejection was stated for in the previous office action as it applied to previous claims 34, 38, 39, 41-44, 46, 51, 53, 55 and 56-58. In response to this rejection applicants have amended claims 9, 34-36, 38, 39, 56 and added new claims 59-62 and traverse the rejection as it applies to the newly amended claims.

Applicants traverse this rejection on the basis that applicants amendment has avoided this rejection. This argument is not found persuasive, because as previously discussed, and now specifically applied to claims 56-58, Blanco et al. teach an isolated polynucleotide that encodes a polypeptide having methylene tetrahydrofolate reductase activity and which comprises a fragment of SEQ ID NO: 1. Applicants is reminded that the currently rejected claims make no stipulation that the encoded fragment need have the disclosed activity, but merely that the polypeptide has the activity and comprises a fragment of SEQ ID NO: 1, both of which properties, the polynucleotide of Blanco et al. inherently have.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard G Hutson whose telephone number is (703) 308-0066. The examiner can normally be reached on 7:30 am to 4:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapu Achutamurthy can be reached on (703) 308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 for regular communications and (703) 305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

A handwritten signature in black ink, appearing to read 'R. G. Hutson', with a horizontal line extending to the right.

Richard G Hutson, Ph.D.  
Primary Examiner  
Art Unit 1652

rg  
9/17/2004